

CLAIMS

1. A method of identifying a candidate drug compound for the treatment of an inflammatory or degenerative brain disease, said method comprising:

testing a candidate drug compound for candidate drug compound's capacity to modulate or mimic MCP-1 binding with a chemokine receptor capable of being expressed on brain glial cells, wherein said chemokine receptor is known in the mouse as L-CCR or in humans as CRAM-B.

2. The method according to claim 1 wherein said inflammatory or degenerative brain disease is selected from the group consisting of ischemia, Alzheimer's disease, multiple sclerosis, and combinations thereof.

3. The method according to claim 1 or 2 wherein the capacity to modulate or mimic MCP-1 binding comprises down-regulating the chemokine receptor.

4. The method according to claim 3 wherein the capacity is tested *in vitro*.

5. The method according to claim 4 wherein mRNA expression of said chemokine receptor is up-regulated.

6. The method according to claim 5 wherein the mRNA expression is up-regulated by treatment with lipopolysaccharide (LPS).

7. The method according to any one of claims 1 to 6 wherein said capacity to modulate or mimic MCP-1 binding is measured by determining chemotaxis.

8. The method according to any one of claims 1 to 8 wherein said chemokine receptor is expressed in a cultured cell.

9. The method according to claim 8 wherein said cultured cell comprises a cell transfected with a nucleic acid encoding at least a functional fragment of a receptor known in the mouse as L-CCR or in humans as CRAM-B.

10. The method according to claim 11 wherein said cell comprises a HEK cell.

11. A cell comprising a recombinant nucleic acid encoding a receptor known in the mouse as L-CCR or in humans as CRAM-B or a functional equivalent of said receptor.

12. A non-human animal comprising the cell of claim 12.

13. A process for obtaining or identifying an agonist or antagonist of degenerative or inflammatory disease, said method comprising:

testing a candidate agonist or antagonist compound in the method according to any one of claims 1 to 7, and

determining said candidate agonist or antagonist compound's capacity to modulate or mimic MCP-1 binding to said receptor in said method.

14. An agonist or antagonist of degenerative or inflammatory disease obtainable or identifiable by the method according to claim 13.

15. The agonist or antagonist of claim 14 together with a pharmaceutically acceptable excipient to form a pharmaceutical composition.

16. A method of treating a neurodegenerative or neuroinflammatory disease, said method comprising:

administering the pharmaceutical composition of claim 15 to a subject.

17. A method of identifying a candidate drug compound for the treatment of a disease selected from the group consisting of ischemia, Alzheimer's disease, multiple sclerosis, and combinations thereof, said method comprising:

testing, *in vitro*, a candidate drug compound for candidate drug compound's capacity to down-regulate a chemokine receptor capable of being expressed on brain glial cells, wherein said chemokine receptor is known in the mouse as L-CCR or in humans as CRAM-B.